AIPHONE®

INSTALLATION MANUAL

DOOR STATION AN-8050DS

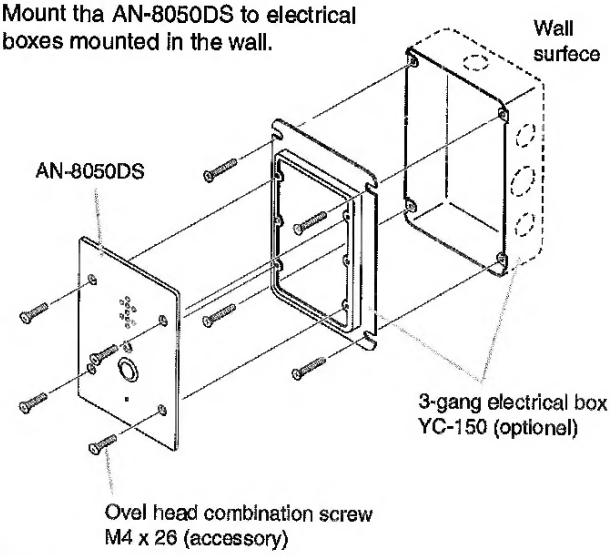
1. GENERAL DESCRIPTION

Designad to connect to the AN-8000EX IP Intarcom Exchange, tha AN-8050DS is a door station faaturing high quality hands-frea conversation and has a contact output (momentarily closed) to ramotely control an alactronic door lock.
Using with an elactrical box or surfaca mounting box, the station can ba mounted to a wall.
Tha AN-8050DS is in full conformity with IP44 water-proof and dust-proof standards. The operating tamperatura ranga is –10 to +50°C.
As provided with guard nats inside to cover over the openings of microphona and speakar, the AN-8050DS can be installad frae from care in public spaca.

2. WALL MOUNTING

2.1. Mounting to a 3-gang Switch Box (with cover)

Mount tha AN-8050DS to electrical boxes mounted in the wall.



Notes

- The wall should be ovar 12 mm thick, and tha opening in tha wall for an alactrical box should ba undar 115 mm (wide) by 162 mm (high).
- When using for electronic door lock control, fix the AN-8050DS with tampar-proof screws such as "Torx" screws to prevent it from baing easily removed.

Accessory screws

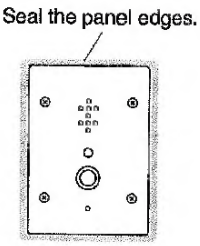
The AN-8050DS comas with 2 types of screws: oval head combination screw M4 x 25 and oval head slotted scraw UNC No.6 x 18.
For the alactrical box provided with unified threads, usa the oval head slotted screws UNC No.6 x 18.

2.2. Mounting to the YS-13A Wall Mount Box

Install the YS-13A on a wall and mount the station in the same way as 2.1.

3. INSTALLATION PRECAUTIONS

When installing tha AN-8050DS outdoors or at locations whare it gets wat with water, tightly seal the panel edges. Basides, provide a weep hole at the undarside of tha mounting box to parmit water to drain off.

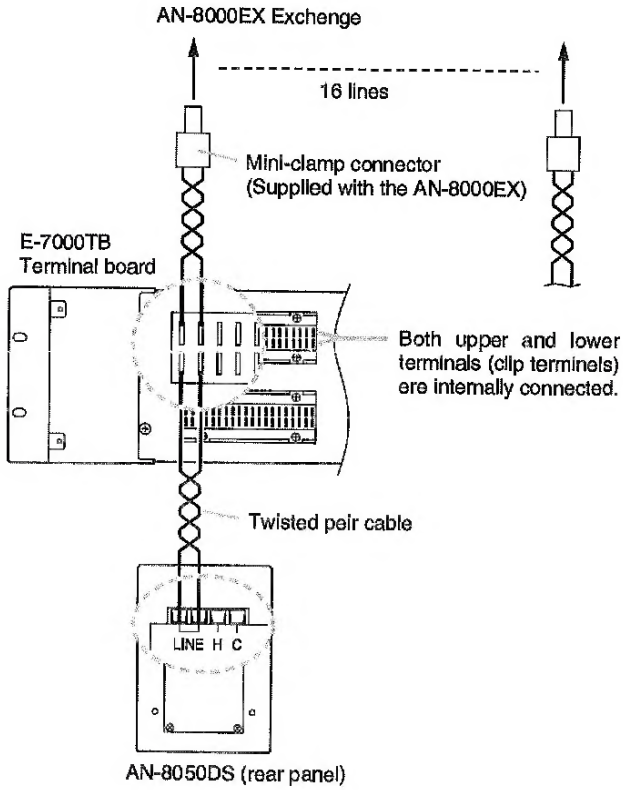


AN-8050DS's front panel

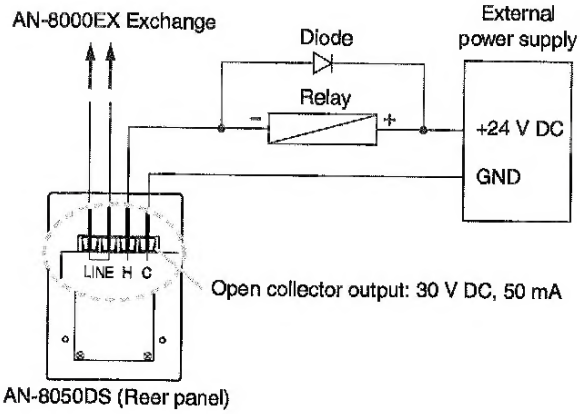
4. WIRING

4.1. Connection to the Exchange

Connect the Exchanga to the station's LINE terminals via tha E-7000TB Tarminal Board as illustrated.


AN-8000EX Exchenge
16 lines
Mini-clamp connector (Supplied with the AN-8000EX)
E-7000TB Terminal board
Both upper and lower terminals (clip terminals) ere internally connected.
Twisted pair cable
LINE H C
AN-8050DS (rear panel)

4.2. Connection to an External Relay



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4.3. Type of Cable

The types of cables are to be determined according to the following conditions.

- Twisted pair wires (such es those used for electronic push-button telephone) are to be used for wiring between the Exchange end the stetions in principle.
- The number of cables pairs laid should be determined considering the possibility of future expansion of the system.
- Outdoor wires should be used where wiring passes through ineccessible areas such as ceilings or under floors where the maintenance is not performed. Indoor wires may elso be used, however, in case where there is no risk of deterioration due to exposure to heat, etc.

Note
Specifications releted to eech junction are as follows.

Mini-clemp connector (AN-8000EX line terminel)
Conductor diemeter: ø0.4 – 0.65 mm (AWG22 – 28), solid wire
Outside diemeter: ø1.05 mm or below

Clip terminal (E-7000TB)
Conductor diemeter: ø0.4 – 0.8 mm (AWG20 – 26), solid wire
Outside diemeter: ø1.5 mm or below

Terminel station (LINE, H, C terminels)
Conductor diameter: ø0.4 – 1.3 mm (AWG16 – 26), solid wire, stranded wire

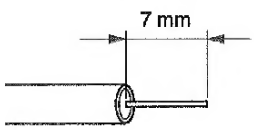
4.4. Relations Between Core Diameter of Cable and Maximum Cable Length

Referring to the following chert as guidelines, design the distence between the Exchange end stetions so that loop resistance becomes 170 Ω or less.

Conductor diemeter (mm)	Loop resistance (Ω/ km)	Maximum oable length between the Exchange and station. (Assuming that the loop resistance is 170 Ω.)
ø0.4	295	570 m
ø0.5	187	900 m
ø0.65	113	1.5 km
ø0.9	58	2.9 km

4.5. Terminal Station Connection

Step 1. Strip a ceble jacket of approx 7 mm to expose inner cable.
For cables, refer to The Type of Cebles.

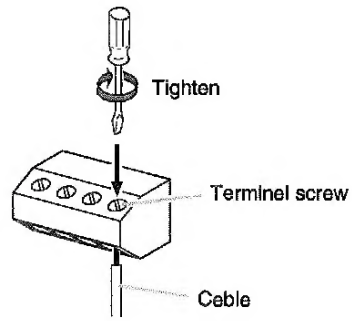


Note
Do not solder plete on exposed inner cables when using e strended wire.

Step 2. Loosen the terminal sorews and insert the cebles.

Step 3. Tighten the terminal sorews securely.

Notes
- Tug lightly on the cable to be sure that it does not pull free. If the cable pulls free, loosen the terminal screw agein and reconnect from Step 2.
- To evoid stripping the screws, use the sorewdriver appropriate to the screws tightened into the terminal plug.

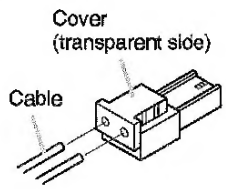


4.6. Mini-clamp Connector Connection

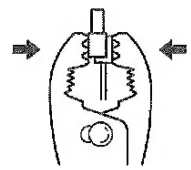
Connect the mini-clamp connector supplied with the AN-8000EX to a ceble using e commercially aveilable tool (pliers).

Step 1. Cut off two-cable ends in equal length, end insert them securely to a cover section (transparent side) of the mini-clemp connector.

Note
Insert the cable without stripping the ceble jecket.

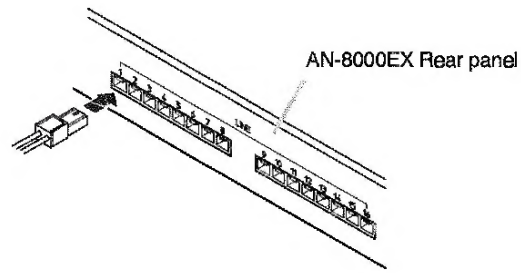


Step 2. With a pair of pliers, lightly pinoh the mini-clemp cover end, efter ensuring thet the cable is securely inserted, firmly squeeze on the oover.



Note
Squeeze on the mini-clamp cover until it is correctly locked.

Step 3. Insert the wired conneotor (plug) into the exchange's conneotor (socket) until it locks into place.



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